

CLAIMS

1. A method for formulation of queries for use in accessing information from a knowledge base, said method comprising:

5 (a) displaying a first menu list of words or phrases;

(b) receiving a first selection of at least one of the words or phrases in the first menu list; and

(c) obtaining a second menu list of words or phrases based on the first selection of at least one of the words or phrases in the first menu list.

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2. A method as recited in claim 1, wherein said obtaining (c) comprises dynamically generating the second menu list based on the first selection of at least one of the words or phrases in the first menu list.

15 3. A method as recited in claim 1, wherein said method further comprises:

(d) receiving a second selection of at least one of the words or phrases in the second menu list.

20 4. A method as recited in claim 3, wherein said method further comprises:

(e) formulating a query from at least the first selection and the second selection.

25 5. A method as recited in claim 4, wherein the query is a phrase, sentence or question.

6. A method as recited in claim 4, wherein the query is a natural language phrase, sentence or question.

7. A method as recited in claim 4, wherein said obtaining (c) comprises dynamically generating the second menu list based on the first selection of at least one of the words or phrases in the first menu list.

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8. A method as recited in claim 4, wherein said obtaining (c) comprises selecting the second menu list from a plurality of predetermined menu lists based on the first selection of at least one of the words or phrases in the first menu list.

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9. A method as recited in claim 4, wherein the at least one of the words or phrases associated with the first selection and the at least one of the words or phrases associated with the second selection are used in the query produced by said formulating (e).

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10. A method as recited in claim 4, wherein said method further comprises:

(f) displaying the query produced by said formulating (e).

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11. A method as recited in claim 4, wherein said formulating (e) comprises concatenating the first selection and the second selection together to form at least a portion of the query.

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12. In a mobile computing device having a display and at least one user input button, a method for facilitating user input, said method comprising:

(a) receiving a series of user word or phrase menu selections, the series of user word or phrase menu selections being associated with a series of menus that are presented on the display; and

(b) constructing one or more phrases, sentences or questions from the series of user word or phrase menu selections.

13. A method recited in claim 12, wherein the user word or phrase menu
5 selections with respect to earlier of the menus of the series of menus affects the particular words or phrases in subsequent of the menus of the series of menus.

14. A method as recited in claim 12, wherein the one or more phrases,
10 sentences or questions being constructed by said constructing (b) are natural language phrases, sentences or questions.

15. A method as recited in claim 12, wherein said method further
comprises:
15 (c) displaying the one or more phrases, sentences or questions from said constructing (b).

16. A method as recited in claim 15, wherein said displaying (c) operates
to incrementally update the one or more phrases, sentences or questions
20 being displayed as each of the series of user word or phrase menu selections are individually made.

17. A method as recited in claim 12, whereby a user is able to provide the
one or more phrases, sentences or questions as user input to the mobile
25 computing device through menu selections of words or phrases and thus without having to enter individual characters thereof.

18. A method as recited in claim 12, wherein at least adjacent ones of the
menus in the series of menus have a grammatical and/or contextual
30 relationship.

19. A method as recited in claim 12, wherein the mobile computing device is a hand-held or wearable computing device.

5 20. A method as recited in claim 12, wherein said constructing (b) operates to construct the one or more phrases, sentences or questions based on the series of user word or phrase menu selections and based on one or more of user selection history, user preferences, content or application.

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21. A method as recited in claim 12, wherein the series of menus are predetermined.

22. A method as recited in claim 12, wherein a plurality of the menus in
15 the series of menus are dynamically determined in response to menu selections.

23. A method for retrieving information from a knowledge base for a user, said method comprising:

20 (a) constructing a natural language query from a series of user word or phrase menu selections, the series of user word or phrase menu selections being associated with a series of menus that are presented to the user;

(b) processing the natural language query to obtain a response from
25 the knowledge base; and

(c) displaying the response the user.

24. A method for retrieving pertinent information from a data source for a user, said method comprising:

- (a) displaying an initial menu of words or phrases;
- (b) receiving an initial user menu selection of at least one of the words or phrases of the initial menu;
- (c) obtaining a subsequent menu of words or phrases based on the
5 initial user menu selection;
- (d) displaying the subsequent menu of words or phrases;
- (e) receiving a subsequent user menu selection of at least one of the words or phrases of the subsequent menu;
- (f) displaying an initial query in accordance with at least the
10 subsequent user menu selection;
- (g) determining whether additional user menu selections are desired or needed;
- (h) repeating said obtaining (c) through said displaying (f) until said determining (g) determines that no additional user menu selections are
15 desired or needed, wherein an updated query is displayed by said displaying (f) in accordance with at least the plurality of the subsequent user menu selections;
- (i) obtaining a response to the updated query; and
- (j) presenting the response to the user.
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25. A method as recited in claim 24, wherein said obtaining (i) comprises:
- (i1) forming a request for the response to the updated query;
- (i2) transmitting the request to a remote server from which the response is obtained; and
- 25 (i3) receiving the response from the remote server.
26. A method as recited in claim 24, wherein said presenting (j) comprises displaying the response.

27. A method as recited in claim 24, wherein the words or phrases in the initial menu are concepts.

28. A method as recited in claim 24, wherein the initial query and the
5 updated query are natural language queries.

29. A computer readable medium including at least computer program code for composing phrases, sentences or questions, said computer readable medium comprising:

10 computer program code for displaying a first menu list of words or phrases;

computer program code for receiving a first selection of at least one of the words or phrases in the first menu list; and

15 computer program code for obtaining a second menu list of words or phrases based on the first selection of at least one of the words or phrases in the first menu list.

30. A computer readable medium as recited in claim 29, wherein said computer program code for obtaining dynamically determines the second
20 menu list after the first selection has been received.

31. A computer readable medium as recited in claim 29, wherein said computer readable medium further comprises:

25 computer program code for receiving a second selection of at least one of the words or phrases in the second menu list; and

computer program code for forming a phrase, sentence or question from at least the first selection and the second selection.

32. A computer readable medium as recited in claim 31, wherein the phrase, sentence or question is a natural language phrase, sentence or question.

- 5 33. A computer readable medium as recited in claim 31, whereby the phrase, sentence or question is form through menu selections of words or phrases and thus without having to enter individual characters therefor.

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